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10/591,887	06/22/2007	Richard Edmond Fletcher	CDM/8877.0001	6943

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EXAMINER

WRIGHT, MADISON L

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3781

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/591,887	Applicant(s) FLETCHER, RICHARD EDMOND	
	Examiner Madison L. Wright	Art Unit 3781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 15 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-14, 17-24, 26-28 and 30-34 is/are rejected.
- 7) ☒ Claim(s) 10, 16 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2009 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 28 and 31-34 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The original claims do not mention a further membrane and different types of inserts.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 28 and 31-34 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the insert comprises a support means for attaching the membrane to a surface comprising at least one suction pad must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement

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sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 6 is objected to because of the following informalities: In line 2 of claim 6, the applicant says, "two annular weld **areas either** side of the channel". The word "on" should be added after "areas" to make the sentence grammatically correct. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 20 and 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claim 20, the applicant describes the "at least one suction pad" on page 3, lines 22-23 of the specification, however it is not clear what the surface is that has the suction pad and where it is with respect to the insert.

As to claim 27, the applicant never mentioned in the application that the valve means is a stop valve.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 13 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 13 recites the limitation "the joint" in the second line of claim 13. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 18 recites the limitation "the insert module" in the first two lines of claim 18. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

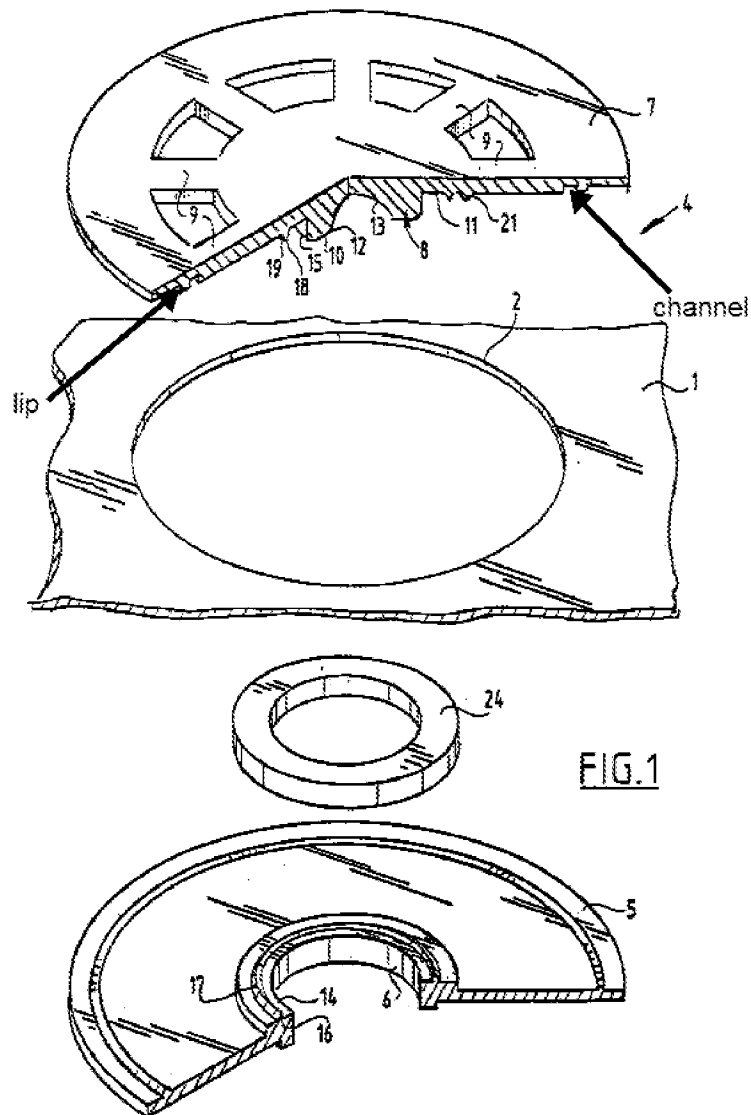
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-4, 6, 7, 13, 14, 21-24, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,121,840 to Schram ("Schram").

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This figure, now referred to as Schram annotated Fig. 1, used for the rejection of claims 4 and 13 has been replicated below, and the Examiner has added reference points for ease of explanation, and said reference points will be used for the rejection of claims 4 and 13 below.



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As to claim 1, Schram teaches a fitting for attachment to a membrane, said fitting comprising a mounting adapter (flexible outer plate 5) to be secured to said membrane (body 1), a resiliently deformable part (laterally extending wings 9) associated with said mounting adaptor (col. 2, lines 15-26) and arranged to embrace and hold an initially separate insert (sealing ring 24), in which said resiliently deformable part is a cylindrical element (valve body 8) and the initially separate insert comprises a substantially cylindrical portion (Fig. 1), the cylindrical portion having an outer surface having an outer diameter and the deformable cylindrical element has an inner surface with an inner diameter which allows the cylindrical portion of the insert to be inserted into the resiliently deformable element (col. 2, lines 43-48), the deformable element being arranged such that when the mounting adaptor is secured to said membrane and exposed to a pressure exerted by fluid at one of two sides of the membrane, the inner surface of the resiliently deformable element is urged into gripping engagement with the outer surface of the cylindrical portion of the insert (col. 2, lines 57-66).

As to claim 2, Schram teaches a fitting as claimed in claim 1 wherein the mounting adaptor is provided with a flange for arranging and securing the fitting to the membrane (Fig. 3a).

As to claim 3, Schram teaches a fitting as claimed in claim 2 wherein the flange is formed from a weldable material whereby it may be welded to the membrane of the structure (col. 2, lines 12-14).

As to claim 4, Schram teaches a fitting as claimed in claim 2 or claim 3 wherein the flange is provided with an annular channel (channel, Schram annotated Fig. 1).

As to claim 6, Schram teaches a fitting as claimed claim 4 wherein the flange is provided with two annular weld areas either side of the channel. The fitting as taught by Schram teaches two annular weld areas on either side of the channel in as much as shown by the applicant.

As to claim 7, Schram teaches a fitting as claimed in claim 2 wherein the resiliently deformable part is joined to the flange (Fig. 3a).

As to claim 13, Schram teaches a fitting as claimed in claim 2 wherein at the location of the joint of the resiliently deformable part (laterally extending wings 9) with the flange (Fig. 3a) there is provided an annular lip (lip, Schram annotated Fig. 1) for locating the fitting within an aperture of the membrane and which upon melting welds the edges of the aperture to the fitting (col. 2, lines 10-14).

As to claim 14, Schram teaches a fitting as claimed in claim 13 wherein the annular lip is bonded to seal the edges of the aperture (col. 2, lines 10-16).

As to claim 21, Schram teaches an assembly comprising a fitting in accordance with claim 1 for attachment to a membrane of an inflatable structure (col. 1, lines 59-63).

As to claim 22, Schram teaches an assembly comprising a fitting in accordance with claim 1 for attachment to a membrane of a fluid container (col. 2, lines 67-68 and col. 3, lines 1-2).

As to claim 23, Schram teaches an assembly as claimed in claim 21 wherein the fluid in the inflatable structure comprises a gas (col. 2, lines 67-68).

As to claim 24, Schram teaches an assembly as claimed in claim 22 wherein the fluid in the fluid container comprises a liquid (col. 2, lines 67-68 and col. 3, lines 1-2).

As to claim 30, Schram teaches a fitting as claimed in claim 1 in which the substantially cylindrical portion of the insert defines a fluid flow path through the fitting (col. 2, lines 49-56).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schram in view of U.S. Patent No. 5,351,711 to Peter ("Peter").

As to claim 5, Schram teaches a fitting as claimed in claim 4, but does not teach wherein the flange is provided with a rigid ring.

Peter teaches a nozzle 1 with a welding rim 2 that has a reinforcing ring 30, as seen in Fig. 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the reinforcing ring of Peter with the fitting as taught by Schram to increase the sealing strength (Peter, col. 6, lines 6-9).

14. Claims 8, 9, 11, 12, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schram in view of U.S. Patent No. 4,766,628 to Walker ("Walker").

As to claim 8, Schram teaches a fitting as claimed in claim 1, but does not teach wherein the resiliently deformable cylindrical element comprises a sleeve for receiving the insert, said sleeve joined by a radially extending web to an outer cylindrical part of the mounting adaptor.

Walker teaches a filler check valve assembly 36 that is mounted to a holder 103 where the holder has a generally upright tubular body 104 joined to an annular flexible wall 106, as seen in Fig. 9.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the tubular body of Walker with the fitting as taught by Schram to make the fitting easy to manufacture (Walker, col. 1, lines 44-45).

As to claim 9, Schram modified by Walker teaches a fitting as claimed in claim 8 which when in use is in contact with the fluid (col. 2, lines 67-68).

As to claim 11, Schram modified by Walker teaches a fitting as claimed in claim 8 wherein an axial end of the sleeve is flexibly connected to the outer cylindrical part, as taught by Walker. Walker teaches the tubular body 104 is joined to an annular flexible wall 106 (Walker, col. 3, lines 57-58).

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As to claim 12, Schram modified by Walker teaches a fitting as claimed in claim 11 which when attached to a membrane the axial end furthest from the membrane of the sleeve is flexibly connected to the outer cylindrical part. Walker teaches the tubular body 104 is joined to an annular flexible wall 106 (Walker, col. 3, lines 57-58).

As to claim 17, Schram teaches a fitting as claimed in claim 1, but does not teach wherein the substantially cylindrical portion of the insert is provided with ribs to engage with said resiliently deformable cylindrical element.

Walker teaches a cylindrical rigid sleeve 109 that has threads 115 to engage with the holder 103, as seen in Fig. 9.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the thread of Walker with the fitting as taught by Schram to make the fitting easy to manufacture (Walker, col. 1, lines 44-45).

As to claim 18, Schram teaches a fitting as claimed in claim 1, but does not teach wherein the insert module is hollow.

Walker teaches a cylindrical rigid sleeve 109, as seen in Fig. 9.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the sleeve of Walker with the fitting as taught by Schram to make the fitting easy to manufacture (Walker, col. 1, lines 44-45).

As to claim 19, Schram teaches a fitting as claimed in claim 1, but does not teach wherein the insert comprises a valve means.

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Walker teaches a cylindrical rigid sleeve 109 that has a tubular guide 116, a plurality of arms 117, a rod 118, a spider head 119, and a circular valving head 122 that are used together to make the valve, as seen in Fig. 10.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the insert and valving means of Walker with the fitting as taught by Schram to make the fitting easy to manufacture (Walker, col. 1, lines 44-45).

15. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schram in view of Walker further in view of U.S. Patent No. 4,583,643 to Sanderson ("Sanderson").

As to claim 26, Schram modified by Walker teaches a fitting as claimed in claim 19, but does not teach wherein the valve means is a pressure relief valve.

Sanderson teaches a valve element 22 that acts as a relief valve (Sanderson, col. 2, lines 11-15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the relief valve capabilities of Sanderson to the fitting as taught by Schram modified by Walker to make a durable fitting that can be reused for many years (Sanderson, col. 1, lines 29-30).

Allowable Subject Matter

16. Claims 10, 16, and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

17. Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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19. Applicant is duly reminded that a complete response must satisfy the requirements of 37 C.F. R. 1.111, including: "The reply must present arguments pointing out the specific distinctions believed to render the claims, including any newly presented claims, patentable over any applied references. A general allegation that the claims "define a patentable invention" without specifically pointing out how the language of the claims patentably distinguishes them from the references does not comply with the requirements of this section. Moreover, "The prompt development of a clear Issue requires that the replies of the applicant meet the objections to and rejections of the claims." Applicant should also specifically point out the support for any amendments made to the disclosure. See MPEP 2163.06 and MPEP 714.02. The "disclosure" includes the claims, the specification and the drawings.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madison L. Wright whose telephone number is 571-270-7427. The examiner can normally be reached on Monday thru Friday, 8:00 to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anthony Stashick/
Supervisory Patent Examiner, Art
Unit 3781

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Examiner, Art Unit 3781